Character Swapping

Digiro likes character swapping, So help him by writing a code to implement character swapping with his rules. A sentence is given as input which contains one or more words and the words are separated by space only. You need to swap characters with in every pair of words from left to right in the given sentence.

Character Swapping rules are given below for every pair of words(two words in pair called as first word and second word)

1. First character in the first word is swapped with first character in second word for swapping, second character in the first word is swapped with second character in second word,...so on.

2. If a character in the first word does not contains a matching character in the second word for swapping, then simply move that character to beginning of second word.

3. If a character in the second word does not contains matching character in the first word, then simply move that character to beginning of first word.

4. If a word in a sentence is not having pair, then simply reverse that word.

5. After performing above set of operations, Change the first character in every word as upper case and all other characters are lower case.

Example 1:

Input: Tody is preassessment

  Take first pair of words: Tody & is

replace T with i,

replace o with s,

        the
characters from first word d and y are not have the matching character in the pair word(second word), so simply move thse character in to second word begining

          so
after swapping words are is & ydTo

Third word is not have the pair so reverse it.i.e. tnemssessaerp.

After applying fifth(5) rule the output: Is Ydto Tnemssessaerp

Output: Is Ydto Tnemssessaerp

Note: Every word in
the given sentence contains only alphabetic characters.

Input format: A line contains input sentence.

Output format: A line contains output sentence.

Program :

```java
import java.util.Scanner;
import java.util.ArrayList;
public class Main {
    public static ArrayList<String> output1;
    public static int output2;
    public static void main(String[] args) {
        ArrayList<String> input1 = new ArrayList<String>();
        input1.add("1000");
        input1.add("3000");
        input1.add("L12u34j");
        monthYear (input1 );
        System.out.println(output1);
//System.out.println(output1.get(0));
//check your test cases here
    }
    public static ArrayList<String> monthYear( ArrayList<String> input1 ){
// Code here
        int count=0;
        String mon="";
        String year="";
        String months[]={"JAN","FEB","MAR","APR", "MAY", "JUN", "JUL",
"AUG"," SEP", "OCT"," NOV", "DEC"};
        ArrayList<String> s = new ArrayList<String>();

        System.out.println(input1.size());
        String str[]=new String [input1.size()];
        for(int i=0;i<input1.size();i++)
        {
            str[i]=input1.get(i);
        }
        int s1=Integer.parseInt(str[0]);
        int s2=Integer.parseInt(str[1]);
        for(int i=0;i<str[2].length();i++)
        {
            if(Character.isAlphabetic(str[2].charAt(i)))
            {
                mon+=str[2].charAt(i);
            }
            else
            {
```

```java
                    year+=str[2].charAt(i);
                }
            }

        mon=mon.toUpperCase();
        System.out.println("month::"+mon+" "+"year::"+year);

        for(int i=0;i<months.length;i++)
        {count=0;
            for(int j=0;j<mon.length();j++)
            {
                if(months[i].contains(mon.charAt(j)+""))
                {
                    ++count;

                }

                if(count==3)
                {
                    mon=months[i];

                }
            }
        }
        System.out.println("month:::"+mon);
        for(int i=s1;i<s2;i++)
        {
            String yl=String.valueOf(i);
            String c1=year.charAt(0)+"";
            String c2=year.charAt(1)+"";
            String c3=year.charAt(2)+"";
            String c4=year.charAt(3)+"";

if(yl.contains(c1)&&yl.contains(c2)&&yl.contains(c3)&&yl.contains(c4))
            {

                s.add(mon+"/"+yl);

            }
        }
        output1=s;
        output2=s.size();
        System.out.println(s.size());
        return output1;

    }
}
```

Output :

```
"C:\Program Files\Java\jdk1.8.0_131\bin\java.exe" ...
3
month::LUJ year::1234
month:::JUL
12
[JUL/1234, JUL/1243, JUL/1324, JUL/1342, JUL/1423, JUL/1432, JUL/2134, JUL/2143, JUL/2314, JUL/2341, JUL/2413, JUL/2431]

Process finished with exit code 0
```